

## **Tools for Building an Entrepreneurial Economy**

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***"If entrepreneurial companies are the source of new jobs and reinvestment in communities, failure to foster entrepreneurship... is simply an unacceptable policy choice."***

**National Commission on Entrepreneurship, *Embracing Innovation: Entrepreneurship and American Economic Growth***

### **Michigan Entrepreneurship Score Card**

The *Michigan Entrepreneurship Score Card* is an entrepreneur-based benchmarking report that uses 127 standard metrics to compare Michigan against *all other states*. The Score Card is grounded in the theory that - among all the major factors affecting economic growth - entrepreneurship is *the most important*.<sup>1</sup> Our strong endorsement of entrepreneurship as an economic development strategy is based on a solid base of research, including the 2007 report from the U.S. Small Business Administration, Office of Advocacy, which concluded: *...state efforts to promote small business formation will be more fruitful in terms of generating economic growth than virtually any other policy option...*<sup>2</sup>

As Michigan undergoes a wrenching economic change, one thing is becoming vividly clear: entrepreneurship must play a central role in any viable economic development strategy. Indeed, as the report from the National Commission on Entrepreneurship titled, *Embracing Innovation: Entrepreneurship and American Economic Growth* has aptly noted: *"If entrepreneurial companies are the source of new jobs*

<sup>1</sup> "Entrepreneurial Growth Companies transform change into opportunity: Jobs - 5-10% of U.S. firms ("ECGs") create 2/3 of 240,000 new jobs every month; Innovation - Entrepreneurs account for at least 2/3 of all technological innovation; Prosperity - 1/3 to 2/3 of difference in national growth rates is due to high growth companies" (Patrick Von Barga, Executive Director, National Governors Association, National Commission on Entrepreneurship).

<sup>2</sup> Donald Bruce, John A. Deskins, Brian C. Hill, and Jonathan C. Rork, Maryland, TN, "Small Business and State Growth: An Econometric Investigation," under contract with the U.S. Small Business Administration, Office of Advocacy, 2007, Report 292.

and reinvestment in communities, failure to foster entrepreneurship... is simply an unacceptable policy choice.” Thus, the goal of the Michigan Entrepreneurship Score Card is to foster a *Dynamic Entrepreneurial Economy*, characterized by the robust creation, retention, expansion and attraction of entrepreneurial small businesses in the state.

### **Entrepreneurial Dynamism**

To simplify analysis and benchmarking, the *Score Card* is organized into eight groupings or “drivers.” Three of the “*primary*” drivers are combined into a single composite measure: “*Entrepreneurial Dynamism*” (described below):

#### **Entrepreneurial Dynamism**

<b><u>Primary Drivers</u></b>	<b><u>Measure</u></b>
Entrepreneurial <i>Change</i>	The amount of entrepreneurial growth or decline in an economy (i.e., factors that effect business <i>startup (stage one) and growth</i> ).
Entrepreneurial <i>Vitality</i>	The absolute level of entrepreneurial activity (i.e., factors that effect the <i>pace and robustness</i> of entrepreneurial activity).
Entrepreneurial <i>Climate</i>	The capability of an economy to foster entrepreneurship (i.e., factors that <i>foster or discourage</i> entrepreneurial change and vitality).

#### **Michigan Entrepreneur Dynamism Rank**

	2006-07 Rank	2005-06 Rank	2004-05 Grade
<b>Entrepreneurial Dynamism</b>	<b>44</b>	<b>31</b>	<b>44</b>
<b>Entrepreneurial Dynamism Grade</b>	<b>D-</b>	<b>D</b>	<b>F</b>
Entrepreneurial <i>Change</i>	<b>46</b>	<b>44</b>	
Entrepreneurial <i>Vitality</i>	<b>38</b>	<b>28</b>	
Entrepreneurial <i>Climate</i>	<b>38</b>	<b>25</b>	

**Rankings:** 50 States, lower numbers are better - higher numbers indicate lower ranking.

The remaining metrics are clustered into five “*secondary*” drivers, measuring, *Education and Workforce Development, Business Costs and Productivity, Government and Regulatory Environment, Infrastructure and, Quality of Life*.

#### **Quality of Data**

It is important to note that the *Michigan Entrepreneurship Score Card* does not derive its measures from original research. The Score Card uses the most up-to-date sources of information available, taken directly from standard, highly respected and authoritative secondary databases as well as highly respected methodologies for our analysis. The report is highly regarded among qualified professionals and policy makers in the areas of economic development, public policy, finance, education and entrepreneurship.

A key finding of the Global Entrepreneurship Monitor report on high expectation businesses was, “*active policy has a role to play in promoting high expectation entrepreneurial activity.*” The report aptly notes that “*there is room for active entrepreneurship policy interventions*” in current governmental economic development policy.<sup>3</sup> The 2006-2007 Michigan Entrepreneur Score Card mirrors these findings with regard to the Michigan economy.

While the Score Card *shows tremendous progress* in some areas critical to robust entrepreneurship<sup>4</sup> it also clearly shows that **an Entrepreneurial Economy in Michigan simply cannot evolve freely in a state that inhibits the commercialization of new knowledge, does not openly, aggressively and forthrightly address its change-averse culture and does not make the promotion and encouragement of entrepreneurial behavior an absolute priority for the state and every single institution, organization and individual that receives state support.**

Towards that end, the Small Business Association of Michigan offers the following policy principles for consideration. These policy principles are **not** offered as a criticism of existing policy, people or institutions.

**1. Michigan Transferable R&D Tax Credit** - R&D Tax Credits are typically used to foster and stimulate the *invention* of breakthrough technology innovations. These tax credits offset the cost of research and are typically used by large companies with internal research and development capabilities. R&D Tax Credits for large businesses make sense, from an economic development point of view, as long as there is a high level of assurance that the successful results of the research and development will be commercialized in Michigan. In-licensing, outsourcing, globalization, etc. all raise serious questions regarding the usefulness of traditional R&D Tax Credits.

A number of states offer R&D Tax Credit rates for different levels of R&D spending. Many of these states offer credits with a lower rate for higher investments in R&D in order to provide greater incentive to small businesses and start-ups to perform R&D. ***A Michigan Transferable R&D Tax Credit would simply be a new – albeit groundbreaking - variation of the State R&D Tax Credits.***

Under a Transferable R&D Tax Credit, small R&D firms could transfer the Tax Credit to Michigan manufacturers who will purchase a license to the new breakthrough technology and commercialize the successful research results in the form of new breakthrough products and/or processes. The Tax Credit would offset the start-up costs for the Michigan Manufacturer(s) associated with the commercialization of the new breakthrough products. The cutting-edge small business entrepreneurs would have the potential to become a new and valued part of the Michigan Manufacturer’s supply chain. The Michigan Manufacturer could increase sales and become an attractive investment opportunity for investors.

A Transferable R&D Tax Credit could be applied to direct and indirect costs associated with the following research activities:

- The dollar of Federal SBIR and STTR grants<sup>5</sup> that have a Third-Party Commercialization Cash Match.<sup>6</sup>

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<sup>3</sup> Global Entrepreneurship Monitor, “2005 Report on High-Expectation Entrepreneurship,” 2005. pp 10.

<sup>4</sup> Kaufman Foundation, 2007 State New Economy Index found that Michigan has made more progress in preparing for the knowledge-based economy since 1999 than another state. Michigan ranked 19<sup>th</sup> overall, up from 34<sup>th</sup> place in the 1999 version of the report and up from 22<sup>nd</sup> place in the 2002 index.

<sup>5</sup> Federal Small Business Innovation Research (SBIR) Program: (a) SBIR Phase I: Feasibility study; Proof of Concept research (SBIR – 6 month project up to \$100K. STTR – 12 month project up to \$100K). (b) SBIR Phase II: Concept Development; full R&D (2-year award up to \$500K). Phase IIB: Gap funding; Supplemental research to fit investor needs (NSF support - \$50K to \$250K, Investor support - \$100K to >\$750K). (c) Phase III: Commercialization stage; Commercial application (Private funding support).

- The value of Third Party Commercialization Cash Match funding under SBIR and STTR grants.
- Internal R&D (R&D paid for with internal company assets versus third-party sponsorship).
- License fees for the purchase of licenses to university technologies that serve as a foundation for follow-on R&D.
- Patent costs associated with the breakthrough technology innovations.

**2. Entrepreneurship Education** – As a central tenant of a robust economic development strategy, the state should encourage, support, fund and incentivize the accelerated creation of *standardized and accredited Entrepreneur DEGREE programs - based on the Kaufman Foundation model* - at Michigan universities and colleges. The state should take strong and public leadership in relegating the absurd debate over whether or not Entrepreneurship rises to the level of degree status to the ash-heap of history. Michigan policy makers should only entertain policy discussions centered on how to position Michigan as the recognized world leader in entrepreneurship education.

**3. Small Business Innovative Research and Small Business Technology Transfer** – Robust research, development and related commercialization correlate closely with market leadership and growth and economic development for the communities in which the firms reside. The federal Small Business Innovation Research (SBIR) and Small Business Technology Transfer program provide grants to small businesses to conduct commercially viable research and develop of breakthrough technology innovations, products and processes. Michigan currently falls *well below the national average* for SBIR/STTR grant awards and related commercialization of successful research results. This is especially troublesome given that:

- Over 70% of U.S. Patents are based on federally funded research.
- The federal government funds technology development in areas critically important to Michigan’s “knowledge worker” related economy: *Advanced Manufacturing; Alternative Energy; Biotechnology; Homeland Security; and, Materials and Electronics.*

***Michigan’s SBIR Support System is seriously broken and must be fixed!*** While Michigan’s performance in the Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs did significantly improve in 2004 and 2005.<sup>7</sup>, the state still performs below the national average. The state should strongly encourage a dramatic increase in the development and award of **COMMERCIALLY VIABLE** SBIR and STTR grants in Michigan. Commercially viable grants are those that have **Third-Party Cash Match** under such programs as the National Science Foundation Phase I & II B, U.S. Department of Defense FastTrack and National Institutes of Health programs. The state should not encourage nor provide **any financial, resource or in-kind assistance** to any SBIR or STTR grants that do not have demonstrated commercial merit, determined **exclusively** by the existence of Third-Party Cash Match at BOTH the **Phase I and II** states.

**4. Second-Stage, Horizontal vs. First-Stage, Vertical Economic Development Strategy** - The State of Michigan currently operates a First-Stage, Vertical Economic Development strategy that focus on

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<sup>6</sup> The federal SBIR/STTR program requires that R&D grants demonstrate scientific, technical and commercial “merit.” At the Phase I level commercial merit is demonstrated by a short discussion in a 25 page proposal. At the Phase II proposal level “commercial merit” is demonstrated in two ways: (a) A detailed Commercialization Plan that is reviewed by a minimum of three Commercialization Plan Reviewers; and, (b) An OPTIONAL Third-Party Cash Match (\$.25:\$1.00). Generally, those with Third-Party Cash Match receive “priority of funding” and are eligible to receive additional R&D dollars and commercialization training and assistance from the funding agency. The Third-Party Cash Match option is based on the premise that private sector interest and due diligence - in the form of Third-Party Match - is the best mechanism for determining real commercial merit.

<sup>7</sup> Michigan moved from 1.87% of the nations 2003 Phase I SBIR awards to 2.1% in 2004 and 2.69% in 2005. In fact, Michigan now ranks in the top 10 states in the Phase I SBIR category. From 2001 to 2004, Michigan ranked 12<sup>th</sup>, 13<sup>th</sup>, 15<sup>th</sup>, and 14<sup>th</sup> respectively Data Source: SBIR Tabulated Data at [www.ssti.org](http://www.ssti.org)

Life Sciences, Advanced Manufacturing, Alternative Energy and Homeland Security. While these industry sectors are *extremely important*, some suggest that the state adopt a Second-Stage, Horizontal Economic Development Strategy that capitalizes on the full complement of entrepreneurs and core competencies in the state.

## Stages of Business Growth

## Business Risks

### Stage 4 Entrepreneurs

(500 Employees +)

### Stage 3 Entrepreneurs

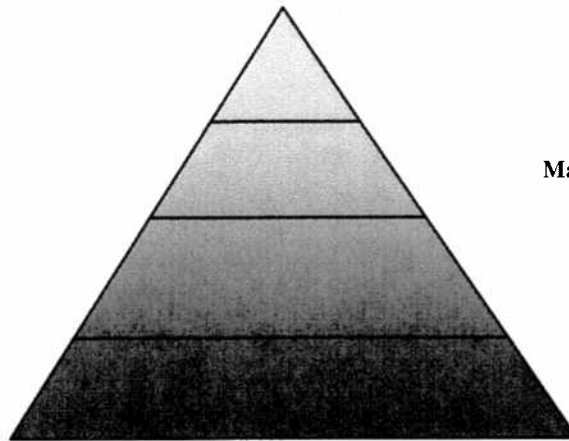
(100 – 499 Employees)

### Stage 2 Entrepreneurs

(10 – 99 Employees)

### Stage 1 Entrepreneurs

(1-9 Employees)



Expansion Capital

Market Growth Rate

Manufacturability

Technology &  
Management

**5. 21<sup>st</sup> Century Jobs Fund** – Numerous leading entrepreneurs in the state – who have been awarded 21<sup>st</sup> Century Jobs Fund grants – are *very dissatisfied* with the way the program has been implemented (specifically Portfolio Management Program and related intellectual property matters) and are considering not accepting the funding under the current contracting guidelines. Accordingly, SBAM strongly recommends the state **redirect** the emphasis and focus of the 21<sup>st</sup> Century Jobs Fund to the **robust commercialization** of technology developed by Michigan small businesses, universities and research institutes using federally funded research dollars. This would include providing commercialization match funding to these grants. Several guiding principles could be considered in such an effort:

- Fund only projects with a meritorious Applied Research component.
- Fund all projects in a two step process. *Step one - Scientific and Technical Review* (only those projects with scientific and technical merit would move on to Step Two). *Step Two - Commercialization Review* (awards made exclusively on Commercial Merit).
- Consider providing businesses with grants, not loans. The program could follow the example of model state and national program that use third-party match funding requirements, well designed grant solicitations, sound contract language, incentives and controls to encourage the participation of businesses that are *committed to the robust development and commercialization* of breakthrough technology innovations in Michigan.
- The state could give priority to projects that aggressively leverage federal dollars with state dollars for commercially viable projects.

**6. Phased-in Burden of Government** – The burden of government should be closely linked to business stages (i.e., startup, seed, growth, expansion) and the risks associated with each stage (technology, management, manufacturability, market and market-growth). Accordingly, SBAM suggests the following policies:

- **Business-to-Business Taxation** - Business-to-business transaction taxes are particularly onerous for entrepreneurial companies and can be a *major barrier* to the research, development and commercialization of breakthrough technologies, products and/or processes. Business-to-business taxation should not be a part of any new state taxation structure for this and many other reasons.

- **Entrepreneurial Impact Statement** - Michigan has a regulatory legacy whereby most regulations, rules and business incentives were designed around the needs of large durable-goods manufacturers, principally automotive companies. An entrepreneurial economy requires regulations, rules and business incentives that reflect the needs of first and second-stage entrepreneurs. Toward this end, the state should seriously consider enacting a new *Entrepreneurial Impact Statement* that would require the state to review rules and regulations with regard to their positive and negative impact on first and second-stage entrepreneurs.
- **Mandate Free Health Care Policy** – Numerous studies have concluded that *rising health care costs are a significant barrier to entrepreneurship*. Indeed, the phenomena of “job-lock” where individuals stay at a job because of the health care benefits rather than seek better employment or entrepreneurial business activity, is clearly documented in state with mature economies. The cost of health care in Michigan is driven by a number of factors, including mandates. Allowing entrepreneurs to offer a mandate-free, cafeteria-style health care program would alleviate upward costs pressures on health-care packages offered to employees.

**7. University Technology Transfer** – What has been termed the “European Paradox” explains how modest growth can occur even with high levels of investment in human capital and research. 3-M had it right when they said *research and development is the conversion of money into knowledge; commercialization of the conversion of knowledge back into money*. As a state, Michigan universities and colleges receive close to \$1 Billion per year in research grants. While Michigan is improving in the transfer of tax-payer funded research to industry for commercialization, we continue to lag behind in a very significant metric: *less than 1% of every university and college budget in Michigan comes from the sale of intellectual property that resulted from tax-payer funded research*. Numerous studies have shown that it is entrepreneurship that is the mechanism that converts knowledge into commercial activity.<sup>8</sup> One way to encourage Michigan colleges and universities to be more active in Technology Transfer is to *tie state Higher Education funding to a formula that is based on the percentage of their annual budget that is derived from the sale of tax-payer funded research*.

**8. Sense of Community** – Medal of Freedom Winner John Gardner, in his insightful work titled “Building Community” notes that, “*Where community exists it confers upon its members identify, a sense of belonging, a measure of security*”. Related to this finding, Raymond W. Smilor, noted author and honored entrepreneur, also notes in his work *Entrepreneurship and Community Development* that, “*Entrepreneurship can help confer identify, belonging and security not only on those who elect to start and grow enterprises, but also on those who join them in that effort and on the wider environment in which they operate.*”

Within this context, SBAM notes that “Quality of Life” indicators are particularly important for entrepreneurial businesses and their ability to attract knowledge-economy workers. Thus, it is imperative that Michigan become well versed in the NEXUS between a “Sense of Community” and Entrepreneurship. Accordingly, SBAM strongly recommends that, *before Michigan invests in building communities designed to foster entrepreneurial business*, the state needs to determine *exactly* what Second-Stage entrepreneurs - *in high economic and social multiplier industries* – actually need and want with regard to working conditions, lifestyle, environment, housing and other related factors.

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<sup>8</sup> See: (1) Zoltan J. Acs, David B. Audertsch, Pontus Braunerhjelm and Bo Carlssonse, “Growth and Entrepreneurship: An Empirical Assessment,” (London: Centre for Economic Policy Research), 2005, pp. 2; and (2) S. Michael Camp, “The Innovation-Entrepreneurship NEXUS: A National Assessment of Entrepreneurship and Regional Economic Growth and Development” (Published by the U.S. Small Business Administration and the Edward Lowe Foundation, 2004).

